

# DTC8801 Thermocouple Calibrator



## FEATURES

- High accuracy -  $\pm 0.3^{\circ}\text{C}$   
(Type J T/C – all errors combined)
- Ten (10) common T/C types plus mV
- Accepts both T/C mini-plug and bare T/C wires
- Simple decade control of output
- Three (3) setpoints for each T/C type
- MIN/MAX recall in measure mode
- Input protection to 240 VAC

The Pyragon DTC8801 Thermocouple Calibrator provides high accuracy source and measurement of ten common thermocouples, as well as mV. The DTC8801's accuracy of  $\pm 0.3^{\circ}\text{C}$  for Type J T/Cs includes all errors, at resolutions of  $\pm 0.01^{\circ}\text{C}$  or  $^{\circ}\text{F}$  in measure mode and  $\pm 0.1^{\circ}\text{C}$  or  $^{\circ}\text{F}$  in source mode. Features including MIN/MAX recall in measure mode, three setpoints per thermocouple range, a large knob for decade control of the output in source mode, and the ability to accept bare T/C wires in addition to mini-plug inputs, makes the DTC8801 an accurate, easy-to-use instrument for all your thermocouple calibration needs.

### **Temperature Probe Kits**

A variety of temperature probe configurations are available for use with Pyragon Thermocouple Calibrators. All are Type-K, and feature  $\pm 2.2^{\circ}\text{C}/\pm 0.75\%$  or  $\pm 3.9^{\circ}\text{F}/\pm 0.75\%$  accuracy.

95 Mount Read Blvd., #149  
Rochester, NY 14611 USA  
Phone: 1.800.688.6551  
1.585.697.0444  
Fax: 1.585.697.0445  
Email: info@pyragon.com

 **PYRAGON, INC.**

# DTC8801 SPECIFICATIONS

(1 year at 23°C ±5°C; % of reading unless otherwise noted)

## Output Voltage

Range	-10 to +75.000 mV
Resolution	1 µV
Accuracy	±0.007 % of reading, ±10 µV
Output Impedance	-1 Ohm

## Input Voltage

Range	-10 to +75.000 mV
Resolution	1 µV
Accuracy	±0.007 % of reading, ±10 µV
Input Impedance	> 1 MegOhm

## Thermocouple Source/Measure

Types	J, K, T, E, R, S, B, L, U, C
Range	mV
Resolution	
Source	±0.1°C or °F
Measure	±0.01°C or °F
Accuracy	
J	±0.5 °C; -210 °C to -100 °C ±0.3 °C; -100 °C to +1,200 °C
K	±0.6 °C; -200 °C to -100 °C ±0.35 °C; -100 °C to +1,000 °C
T	±0.5 °C; +1,000 °C to +1,372 °C ±0.7 °C; -200 °C to -150 °C
E	±0.3 °C; -150 °C to +400 °C ±0.5 °C; -200 °C to -100 °C
R	±0.3 °C; -100 °C to +1,000 °C ±1.8 °C; 0 °C to 250 °C ±1.0 °C; 250 °C to +1,767 °C

S	±1.8 °C; 0 °C to 250 °C ±1.0 °C; 250 °C to +1,767 °C
B	±1.7 °C; 600 °C to 1,000 °C ±1.2 °C; 1,000 °C to 1,820 °C
L	±0.5 °C; -200 °C to -100 °C ±0.4 °C; -100 °C to +900 °C
U	±0.7 °C; -200 °C to 0 °C ±0.3 °C; 0 °C to +600 °C
C	±0.4 °C; 0 to °C 1,000 °C ±0.7 °C; 1,000 °C to +1,800 °C ±1.2 °C; +1,800 °C to +2,316 °C

**CJC Temperature Offset** ±0.05 °C/°C outside of 23±5 °C

**Warm-up Time** 1 minute to specification

## Environmental

Operating	-10 °C to +55 °C
Storage	-20 °C to +70 °C

## Power Requirements

Battery	9 Volt alkaline; 006P/ IEC 6F22/ NEDA1604 Optional NiCad Optional AC adapter/charger
---------	---

**Mechanical Dimensions** 5.7" x 3.15" x 1.43"  
(14.47 cm x 8.00 cm x 3.63 cm)

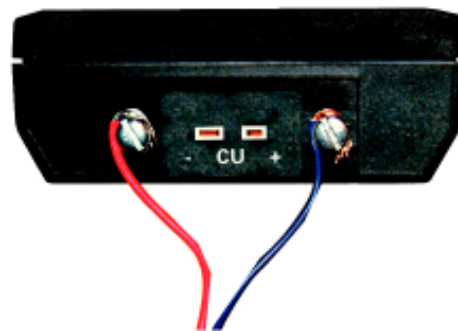
**Weight** 12 ounces (340 grams)

## Notes:

1. Temperature standard ITS-90.

## Need a high performance loop calibrator?

Consider the Pyragon TSC8802. With accuracy of ±0.015% of reading and 0.001 mA resolution, the TSC8802 furnishes significantly extended performance over any competitive calibrator. A % Error function eliminates manual error calculations. The TSC8802 simulates, powers and measures two-wire transmitters, and can remotely calibrate 4-20 mA devices.



The DTC8801 accepts both mini-plug AND bare thermocouple wires!

# △ PYRAGON, INC.

95 Mount Read Blvd., #149  
Rochester, NY 14611 USA  
Phone: 1.800.688.6551  
1.585.697.0444  
Fax: 1.585.697.0445  
Email: info@pyragon.com